Knowledge, opinions and clinical practice regarding postoperative delirium in older patients

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Gildasio De Oliveira
Editor-in-chief
Journal of Clinical Anesthesia
March 04, 2019,

Dear Dr De Oliveira,

I am pleased to submit a letter to the editor entitled "**Knowledge, opinions and clinical practice regarding postoperative delirium in older patients: a survey of nurses and anaesthetists**" by Igwe E. O, Traynor V.T, Rodgers S, Waite A, MacLullich A and I, Foo for consideration for publication in the *Journal of Clinical Anesthesia*.

Postoperative delirium continues to be major complication associated with anaesthesia and surgery which is more commonly seen in older people and sometimes misdiagnosed as dementia. We sought to survey nurses and specialists who are involved in anaesthetics in older people, about their department guidelines and protocols for delirium, and how they would respond to two clinical scenarios.

All authors participated in the writing and proof-reading of the version of the manuscript being submitted and no copyright to any other work was breached in the manuscript's creation and we have no conflicts of interest to disclose.

Thank you for your consideration of this manuscript.

Yours sincerely,

Ezinne O. Igwe

Knowledge, opinions and clinical practice regarding postoperative delirium in older patients: a survey of nurses and anaesthetists

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Running title: Clinical practice regarding POD in older patients

Conflict of interest

The authors of this paper have no conflicts of interest to declare.

Keywords: Postoperative delirium, anesthesia protocols, older people

Delirium is perhaps the most aged-related postoperative complication, with 13-79% of older people, depending on the population group and type of surgery, experiencing post-operative delirium (POD).[1] Only in the last few years has POD been acknowledged by non-geriatric specialists as a major postoperative complication. [2]

The aims of this study were to explore the knowledge and understanding of anaesthetists and anaesthetic nurses on POD in older people using an online survey. This survey was adapted from a previous study [3] which sought to gain insights in Sweden on protocols and practices among anaesthesia practitioners.

This survey consisted of questions in four sections (30 questions) on POD:

1. Demographics
2. Work place practices
3. Subjective preferences on factors that influence choice of anaesthetic plan; and
4. Two case scenarios of different presentations of delirium in older patients

Ethical approval was obtained for this study which was a collaboration between the University of Wollongong, Australia and University of Edinburgh, Scotland.

A total of 226 (19 anaesthetic nurses and 198 medical anaesthetists) respondents from Scotland and Australia answered the survey in part or completely, a response rate of 45%.

More than 80% of the respondents stated that there were no workplace protocols available for anaesthesia plans for older people and 59% do not use clinical guidelines to inform their clinical practice when anaesthetising older people. Respondents reported on factors that

influenced their choice of an anaesthetic plan at the time of preoperative assessment (Table 1).

Care of a patient with postoperative delirium (POD) – Case Scenarios 1

For Case Scenario 1 representing a typical patient with emergent delirium, respondents answered what anaesthesia plan and drug choice they would employ for sedation. Peripheral nerve block (n=88) and spinal blockade (n=91) were the most common choices.

Care of a patient with postoperative cognitive disorder (POCD) – Case Scenario 2

Case Scenario 2 was a patient with typical POCD. Most respondents had no protocol for POCD (n=128, 95.2%) and, in most instances, the patient would not have their cognitive function formally assessed using an assessment tool (n=81, 65.3%).

The use of clinical guidelines in anaesthesia plans for older people is important in understanding anaesthetic practice in clinical settings. The absence of workplace guidelines implies that anaesthetists are either less aware of POD and its associated predictive factors or do not perceive it to be a significant problem.

More than half of the respondents (55%) stated there was no protocol in place to monitor for POD. A review of the guidelines reported by respondents found that only 4 focused on POD (16%)[4], including three mentions of the AAGBI Perioperative Care of the Elderly 2014 publication.

In addition, many of the relevant guidelines for the perioperative management of older people recommend antipsychotics like haloperidol as second-line therapy.[5] In the current study, more than 80% of the respondents chose haloperidol as the first-line treatment in a

POD scenario. Evidence shows that in the absence of a workplace protocol for anaesthesia plans for older people, haloperidol was a first choice in sedating older people with POD. In the perioperative setting, it is important that these drugs are only used to manage POD when there is no alternative and the individuals become a danger to themselves.

A limitation of this study is the low response rate as well as the lack of response bias evaluation. As a result, the result of this survey is considered as a pilot study. Nonetheless, this survey contributes to understanding of perioperative postoperative delirium (POD) care. We found a reasonable level of awareness about best practice POCD care among the participants but, at the same time, an overwhelming agreement that POCD is neglected in anaesthesia. Given that 40% of POD cases are found to be preventable [5] There is a need to improve patient outcomes by more consistently implementing protocols to detect, prevent and manage POD.

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Table 1: Factors influencing the anaesthesia plan at pre-op assessment

Factors	Strongly Agree/Agree	Disagree/ Strongly disagree
Patient's wish	133(97.8%)	3 (2.2%)
Risk of postoperative nausea	134 (97.8%)	3 (2.2%)
Risk of postoperative pain	136(100%)	0(0%)
Risk of postoperative delirium (POD)	120 (84.2%)	16 (11.8%)
Risk of postoperative cognitive dysfunction (POCD)	111 (81.6%)	25(18.4%)
Risk of cardiac events	136 (100%)	0(0%)
Risk of respiratory effects	136 (100%)	0(0%)